SuperNOVA Instructions



Your SuperNOVA is a <u>VERY</u> bright light. Do not look directly at the LED. Do not direct into the eyes of others. Do not allow children to play with this light.

SuperNOVA Quick Start

- 1. Charge battery (see IntelliPulse instructions below)
- 2. Connect Headpiece to battery. Fasten battery strap around both battery and plug (to secure plug in battery)
- 3. The magnetic slide switch has a centre off position. Moving it to one side turns the light on. High and Low power are on opposite sides of "off"
- 4.

SOME DO's and DONT's

<u>DO</u>

- 1. Observe polarity
- 2. Use lens cover (supplied fitted) when lens may scratch (e.g. caving)
- 3. When caving remove mud from heatsink fins. If not possible use low power setting until heatsink can be cleaned.
- 4. Use cable protector on cable when caving
- 5. Clean any accumulated mud from switch by rinsing in water while operating
- 6. Carry a backup light source when used for any potentially hazardous activity
- 7. With helmet mounted batteries, be sure to use supplied strap for attachment. Use of other methods (eg. bungee elastic) will not retain plug correctly and will result in premature wear of battery sockets.

DON'T

- 1. Connect to anything other than a Speleo Technics battery or battery box
- 2. Connect to any battery over 3.6 Volts
- 3. Leave connected to battery when in a rucksack or other container. The SuperNova could overheat if it is accidentally switched on.
- 4. Obstruct the aluminium heatsink
- 5. Use any adaptor cable other than those made by Speleo Technics

IMPORTANT- PLEASE READ

Your SuperNOVA light is a completely new concept. A bright, solid-state, waterproof, tough and controllable LED head torch.

The SuperNOVA's powerful 6 Watt LED will not require replacement so it is sealed. Heat still has to be removed (it is a fallacy that LED's do not produce heat – those which produce very little also produce very little light!) which is why your SuperNOVA has a finned aluminium heat sink. This gives it a thermal resistance around 1/8th that of conventional plastic headpiece shells and allows full performance all of the time without overheating and without "thermal management circuits" which reduce light output. Uniquely the (patented) SuperNova design prevents the water ingress which is a problem with conventional headpieces (which contain an airspace) when used in a caving environment.

The heatsink should be unobstructed in use. If packing in a rucksack or other container it is recommended that the plug should be removed from the battery as damage to the SuperNOVA or rucksack contents could occur if the SuperNOVA accidentally switches on.

The SuperNOVA is designed to be used with the Nova Nickel battery (can be used with older Headlite batteries but with reduced run-time). It is not recommended to use the Nova Flexi battery box with Alkaline Cells because the cells cannot supply enough power for the SuperNOVA's High setting.

To special order the SuperNOVA can be supplied with a cable to fit the DX3 (or older FX3) battery. This is the only combination recommended for Cave Diving. The SuperNOVA must NOT be used on the FX5 battery.

The two types of cable are not interchangeable between battery groups

The LED light is focused by a collimator lens (which looks like a reflector) which is sealed into the SuperNOVA. To protect it from scratching (as in caving) the transparent cover with which it is supplied should be left in place. This is easily and cheaply replaceable which the collimator is not. This cover is no part of the waterproofing system. For replacement, or draining any water which has entered, the cover can be removed by inserting a thumb nail or if in difficulty a (carefully used) screwdriver at the rim. For diving, where there is no risk of scratching, the cover may be left off.

BATTERY INSTRUCTIONS

Nova Nickel (NiMh) Battery

Your battery will normally have been supplied in a fully discharged condition and will require a 16 hour charge on the Speleo Technics IntelliPulse charger.

DO NOT charge the battery below freezing without prior consultation with Speleo Technics. OBSERVE POLARITY - DO NOT SHORT-CIRCUIT

IntelliPulse Chargers

These "smart" chargers are the only ones available for the Nova Nickel (NiMh) battery. IntelliPulse Chargers are full-maintenance 24/7 plug-in-and-forget "smart" chargers.

The red LED gives steady illumination to indicate that the charger has power. It flashes rapidly when the battery is connected, indicating the connection and that the timed main charge is occurring. When this has timed out (approx. 16 hours) it will start to flash slowly to indicate that the battery is fully charged and that the pulsed maintenance charge is taking place. The battery may be used at this point or may be left on pulse charge until it is required.

The charger will get very warm in use

HEALTH & SAFETY INFORMATION

- Use the appropriate charger for the battery. All Speleo Technics chargers have rating plates which detail their compatibility. Use of an incorrect charger could cause damage/injury.
- Do not short-circuit the output contacts or charge with reversed polarity
- Use only accessories manufactured by Speleo Technics for use with this product
- Dispose of carefully and in accordance with environmental rules. Do not cut open, puncture or incinerate.
- The SuperNOVA is very bright. Do not look into the beam or direct it into the eyes of others. Do not allow children to play with the light.

ATTACHMENT OF NOVA NICKEL BATTERIES



Figure 1 illustrates how these batteries are retained on either the elastic headcradle or a helmet. The retaining strap, in each case, passes around the battery and plug which retains the plug on the battery. It should be passed through the moulded loop on the battery top moulding so that a slightly slack strap will not result in the loss of the battery.

IT IS ESSENTIAL THAT THE STRAP IS USED. INAPROPRIATE FASTENINGS (eg. bungee elastic) WILL NOT RETAIN THE PLUG CORRECTLY AND <u>WILL</u> RESULT IN PREMATURE WEAR OF THE BATTERY SOCKETS.

Figure 2 illustrates the drilling dimensions for holes on the back of the helmet for the retaining strap.

Very great care should be taken that none of the internal fastenings nor the helmet structure are damaged. Helmets vary so you will have to determine whether any damage to the effectiveness of the helmet will be caused by this.

Approximate Duration Times

Using the Nova Nickel battery the High setting will give about 3 hours and the Low setting about 19 hours. We do not recommend the use of Alkaline Cells with the *Super*NOVA as they cannot supply the current which the High setting requires.

These figures are only approximate. If duration time is vital to your safety you need to test your NOVA on the battery concerned.

We at Speleo Technics choose a very conservative illumination end point for duration purposes. Many manufacturers choose a lower limit which enhances duration figures.



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